## AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-3. (Canceled)
- 4. (New) A computer-readable media having computer-executable instructions for managing inventory within a supply chain having a plurality of distribution points, the instructions performing steps comprising:

providing for each of a plurality of items distributed within the supply chain a forecast of demand over a forecast period;

using the forecast of demand for each of the plurality of items to establish for each of the plurality of items a critical stocking ratio what indicates a total quantity of each of the plurality of items which can be held in inventory over the forecast period;

using the critical stocking ratio for each of the plurality of items to allocate the total quantity of each of the plurality of items which can be held in inventory over the forecast period among the plurality of distribution points in the supply chain by assigning over the forecast period a base stock level for each of the plurality of items at each of the plurality of distribution points in the supply chain and a reorder point for each of the plurality of items at each of the plurality of distribution points in the supply chain;

determining a replenishment method for each of the plurality of items at each of the plurality of distribution points in the supply chain; and

executing the replenishment method to create orders for items at any of the plurality of distribution points in the supply chain that fail to have a base stock level for any of the plurality

of items thereby causing inventory within the supply chain to be managed in accordance with the critical stocking ratio.

- 5. (New) The computer-readable media as recited in claim 4, wherein the instructions compile and aggregate historical demand data for use in providing the forecast of demand for each of the plurality of items.
- 6. (New) The computer-readable media as recited in claim 5, wherein the historical demand data comprises data representative of demand created by a need to replenish each of the plurality of items at various ones of the plurality of distribution points within the supply chain.
- 7. (New) The computer-readable media as recited in claim 5, wherein the historical demand data comprises data representative of demand created by a need to fulfill customer orders for each of the plurality of items.
- 8. (New) The computer-readable media as recited in claim 4, wherein providing the forecast of demand for each of the plurality of items comprises taking into account historical effects of world factors.
- 9. (New) The computer-readable media as recited in claim 4, wherein providing the forecast of demand for each of the plurality of items comprises considering a need for each of the plurality of items in performance of a maintenance task.